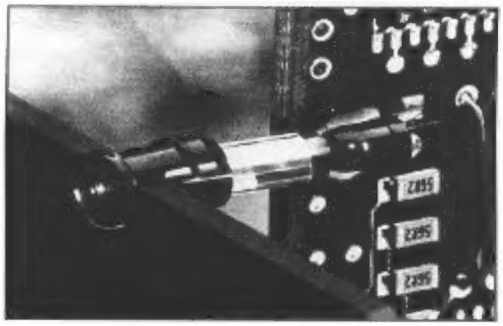
Jameco Part number 109137
109137 124927 14277 29612

CLIPLITE®

VISUAL COMMUNICATIONS COMPANY, INC.
7920-G Arjons Dr., San Diego, CA 92126
In CA (619) 549-6900 (800) 522-5546
FAX (619) 549-3520 www.vcclite.com

LITEPIPES & PANEL LENSES FOR PCB MOUNTED LEDs



VERSATILITY - CLIPLITE litepipe and lense easily provide a means of transmitting the light from PCB mounted LEDs to the front display panel. Both styles of LEDs, surface mount and standard packages, can be displayed in this manner.

BRIGHTNESS - CLIPLITE litepipe by itself has a limited angle of view. However, when used with VCC's fresnel lense the light is disbursed over the entire lense surface producing 180 degrees of viewing.

APPLICATION - CLIPLITE litepipes and lenses are available for use with both surface mount and standard packaged LEDs in 3mm and 5mm configurations. Because there is no physical connection between the litepipe and the PCB mounted LED, the circuit board can be installed or removed without disturbing the panel display.

INSTALLATION - CLIPLITE litepipe and lense are easy to install. Insert the lense thru the panel opening and snap the litepipe into the lense. For added security in harsh environments, a retaining ring is available.

SPECIFICATIONS U.S. & Foreign Pat. Pend.

MATERIAL: Litepipe - Acrylic (Optical grade)
Lense - Polycarbonate; Ring - Polypropylene (U.L. Listed Material).

DESIGN: LIPEPIPE (3mm and 5mm) with annular ring and locking tab engages into the annular grove of VCC's low profile lense. Lense mounts the litepipe securely to the display panel and provides 180 degrees of viewing angle.

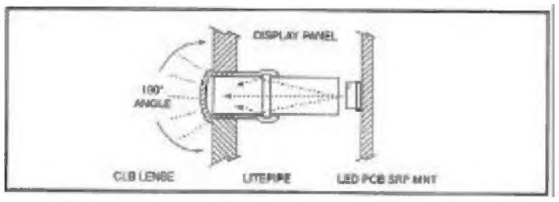
MOUNTING: LITEPIPE 3mm - Mates with VCC's lenses model SMB 200 and SMQ 250. Panel mounting hole 171 (4.3mm) on 1/4" centers. Panel thickness 1/32" to 1/8". Litepipe lengths from .200" to 1.200".

LITEPIPE 5mm - Mates with VCC's lense model CLB 300 and SQB 400. Panel mounting hole .250 (6.35mm) on 3/8" centers. Panel thickness 1/32" to 1/4". Litepipe lengths from .360" to 1.360". For panels less than 3/16" use SPC 125 spacer.

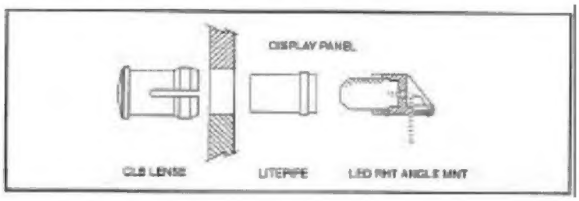
LENSE RETAINING RING - available for added security (RNG 190, 3mm & RNG 268, 5mm).

STANDOFF Use VCC's standoff to adjust the height of a standard LED above the PCB and maintain a maximum .050" clearance between litepipe and LED. See VCC's STD Series data sheet.

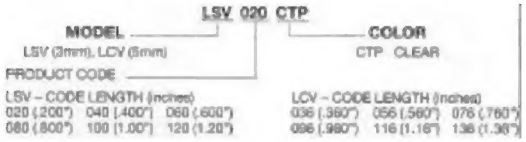
LITEPIPE & SURFACE MOUNT LEDs

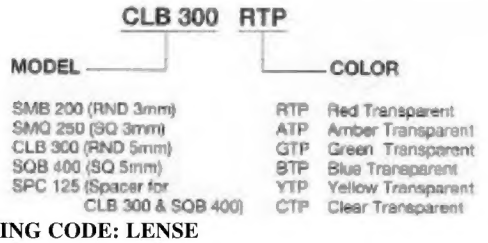


LITEPIPE & RIGHT ANGLE LEDs

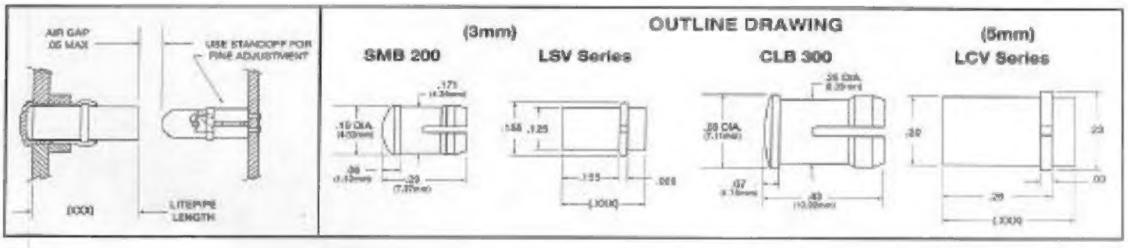


ORDERING CODE: LITEPIPE





ORDERING CODE: LENSE



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LOW PROFILE PANEL LENSES FOR PCB MOUNTED LEDS

U.S. & Foreign Pat. Pend.

VERSATILITY - CLIPLITE, installed in display panel, is used with PCB mounted LEDS. Lenses remain attached to the display or panel door while the LEDs are fixed to the PCB. The lenses are ideal for use together with the CONXRITE connector assembly.

BRIGHTNESS - CLIPLITE utilizes fresnel rings to increase apparent brightness and viewing angle up to 180 degrees with either diffused or nondiffused LEDs.

PROTECTION - CLIPLITE helps prevent IC failures caused by electrostatic discharge (ESD). Introduction of ESD thru an exposed panel mounted LED is capable of damaging or destroying a semiconductor. A CLIPLITE mounted LED helps guard components from ESD up to 16 kv while affording the LED physical protection.

INSTALLATION - CLIPLITE is inserted thru panel opening, retaining ring pressed into place. PCB mounted LEDs slide into lenses when the panel cover is closed or the PCB card is inserted into the case.

SPECIFICATIONS

MATERIAL: Lense - Polycarbonate; Ring - Polypropylene, (U.L. Listed Materials).

DESIGN: Low profile lenses with fresnel rings.

MOUNTING: Mounts thru front of panel, retaining ring secures the lense in place.

3mm (SMC 170) mounts in a .173" (4.4mm) hole on 1/4" centers. Panel thickness 1/32" to 3/32".

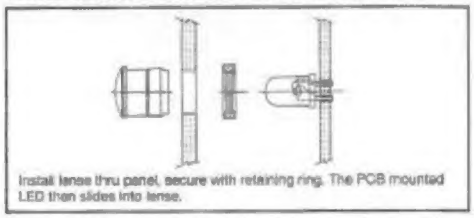
5mm (CMC 321), mounts in a .281" (7.2mm) hole on 3/8" centers. Panel thickness 1/32" to 1/8".

ORDERING CODES

CMC 321 RTP
MODEL — COLOR

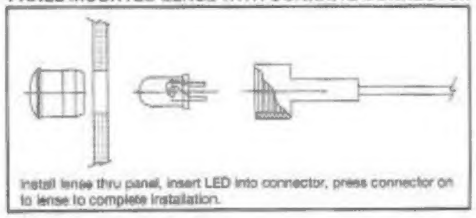
SMC 170 (3mm) L/Profile Lense	RTP Red Transparent
CMC 321 (5mm) L/Profile Lense	ATP Amber Transparent
	GTP Green Transparent
RNG 132 (3mm) Retaining Ring	BTP Blue Transparent
RNG 234 (5mm) Retaining Ring	YTP Yellow Transparent
	CTP Clear Transparent

PANEL MOUNTED LENSE WITH PCB MOUNTED LED



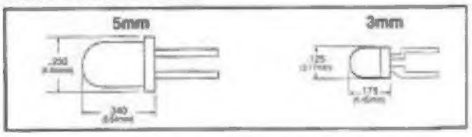
Install lense thru panel, secure with retaining ring. The PCB mounted LED then slides into lense.

PANEL MOUNTED LENSE WITH CONXRITE CONNECTOR

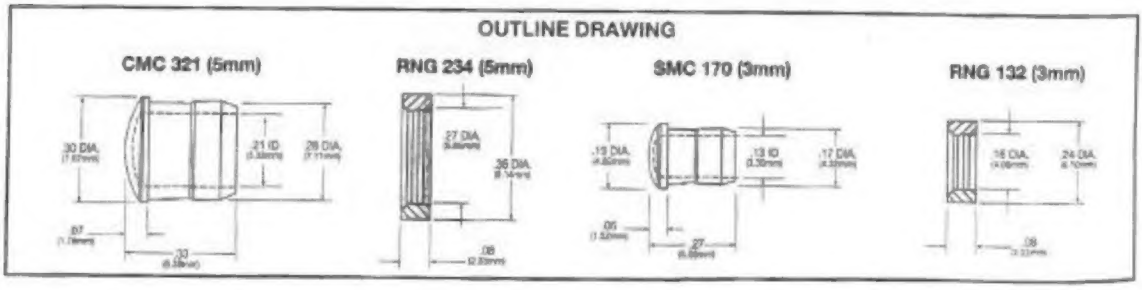


Install lense thru panel, insert LED into connector, press connector on to lense to complete installation.

RECOMMENDED LEDs



OUTLINE DRAWING



Jameco Part number 109137

CLIPLITE®

MOISTURE SEALED LOW PROFILE LENSES FOR LEDs

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VERSATILITY - CLIPLITE, installed in display panel, provides a moisture seal effective against splash and drip conditions. The lense can be used with either circuit board mounted or panel mounted LEDs. For
PCB mounting applications the lense remains attached to the display or panel door while the LEDs are fixed to the PCB. The lense is ideal when used with the CONXRITE connector for mounting the LED directly to the display panel.

BRIGHTNESS - CLIPLITE utilizes fresnel rings to increase apparent brightness and viewing angle up to 180 degrees with either diffused or nondiffused LEDs.

PROTECTION - CLIPLITE tests show it is an effective moisture seal in splash and drip conditions. In addition, the lense helps prevent IC failures caused by electrostatic discharge (ESD). A CLIPLITE mounted LED guards components from ESD up to 16 kv while affording the LED physical protection.

INSTALLATION - CLIPLITE is inserted thru panel opening, retaining ring is then pressed into place compressing the seal. PCB mounted LEDs slide easily into lense allowing simple insertion or removal of the PCB. Panel mounting of the LED is accomplished with the CONXRITE connector which also serves to compress the moisture sealing ring.

MATERIAL: Lense - Polycarbonate; Ring - Polypropylene, Seal - J-Von (U.L. Listed Materials).

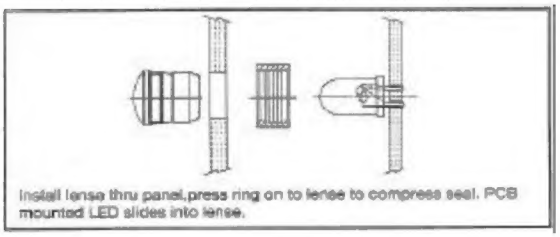
DESIGN: Low profile lenses with moisture seal.

TESTING: Environmental testing performed by Consolidated Labs, Inc. for moisture sealing, shock, vibration and standard operating temperatures. Meets Nema 3 standards.

MOUNTING: Mounts thru front of panel, compression of the seal is accomplished by pressing the retaining ring or CONXRITE connector in place.

5mm (CMS 322), mounts in a 9/32" (7.2mm) hole on 3/8" centers. Panel thickness 1/32" to 1/8". Hole should be deburred but not chamfered.

PANEL MOUNTED LENSE WITH PCB MOUNTED LED



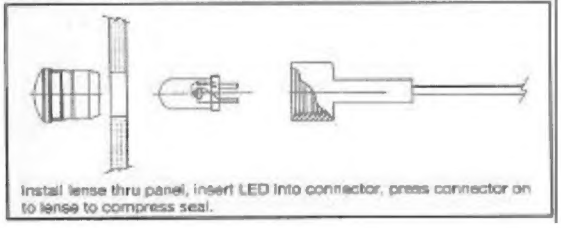
ORDERING CODES

CMS 322 RTP
MODEL — COLOR

CMS 322 (5mm) L/Profile Lense with moisture seal
RNG 268 (5mm) Retaining Ring

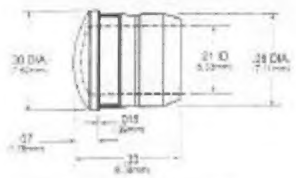
RTP Red Transparent
ATP Amber Transparent
GTP Green Transparent
BTP Blue Transparent
YTP Yellow Transparent
CTP Clear Transparent

PANEL MOUNTED LENSE WITH CONXRITE CONNECTOR

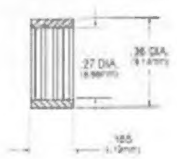


OUTLINE DRAWING

CMS 322 (5mm)

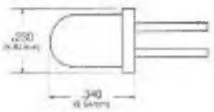


RNG 268 (5mm)



RECOMMENDED LEDs

5mm



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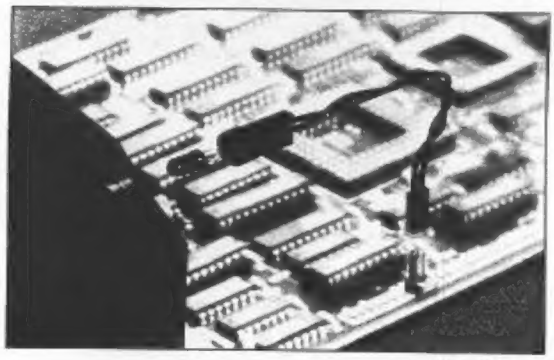
PRE-WIRED SOLDERLESS LED INTERCONNECT



U.S. & Foreign Pat. Pend.

CONXRITE - This modular cabling assembly is designed for use in the electrical connection of panel mounted LEDs to printed circuit boards. This plug-in system eliminates many of the problems associated with wiring display panel mounted LEDs.

APPLICATIONS - Designed to make quick and easy plug-in connections between panel mounted LEDs and the PCB. The modular concept of panel and header housings along with different wire lengths offer a cost reducing solution to cabling problems.

VERSATILITY - Multiple panel mounted LED devices can be connected to PCB mounted headers. A uniquely designed three finger box terminal mates with leads .017" in diameter to .025" square. Cables are available in four, eight, twelve, eighteen and twenty four inch lengths.

INSTALLATION - Modular cabling systems simplify the electrical connection from panel to PCB and eliminate the need for assembly tools. Cost savings from the discontinuing of soldering and terminal crimping operations are substantial.

SPECIFICATIONS

MATERIAL: Panel Connector Socket & Ring - Thermoplastic.
Header Connector - Thermoplastic (UL listed materials)
Terminals - Phosphor bronze, tin plated.
Wire - 22 AWG, 7 strand copper, insulated.

ELECTRICAL: Terminal - 3 amp continuous service.
Unique three-finger design mates to round, square or rectangular leads .017" to .025".

MOUNTING: Panel Connector 3mm - Mate with SMC 170.
Panel Connector 5mm - Mate with CMC 321 & CMS 322.
Can be mated with CLIPLITE models CLF 280, CLB 300, CLR 301, CLIPLITE clipmount models CLP 125, 127, 129 and CUBELITE SQB 400. See data sheets on lenses and mounts.

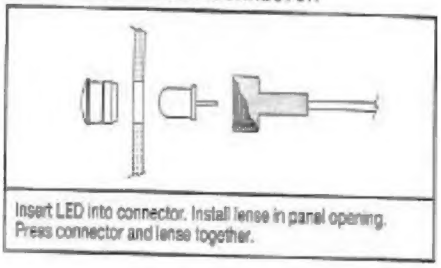
Panel Thickness: - SMC 170, max .100" CMC 321 & CMS 322, max .125 inch. CLF 280, CLP 125, 127 & 129 max .110". CLB 300, CLR 301 & SQB 400 max .250". Use SPC 125 spacer for panels less than 3/16" with CLB, CLP & SQB. Panel Socket 450 470 max .250", use RNG 242 ring for additional security.

LED lead trimming - SMC 170, CMC 321, CMS 322 and 450 470 socket .250" ± .010".

Hole Size - SMC 170 .171" (11/64").
CMC 321 and CMS 322 .281" (9/32").
Use .250" for all other mounts. All holes deburred but not chamfered.

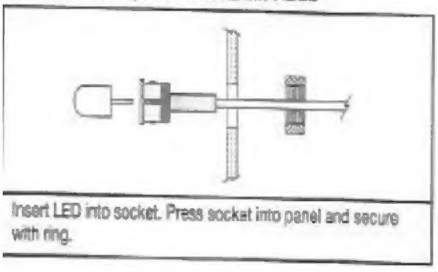
Header Connector - Mates with VCC positive locking header 450 series. Also mates with standard and friction header .025" pins on .100" centers.

PANEL MOUNT LENSE & CONNECTOR

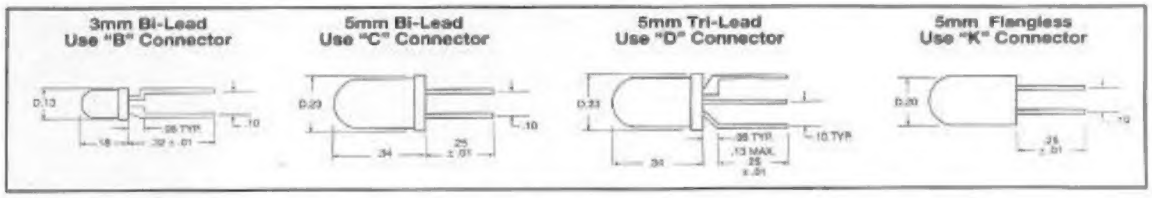


Insert LED into connector. Install lense in panel opening. Press connector and lense together.

PANEL SOCKET, FRONT RELAMPABLE



Insert LED into socket. Press socket into panel and secure with ring.



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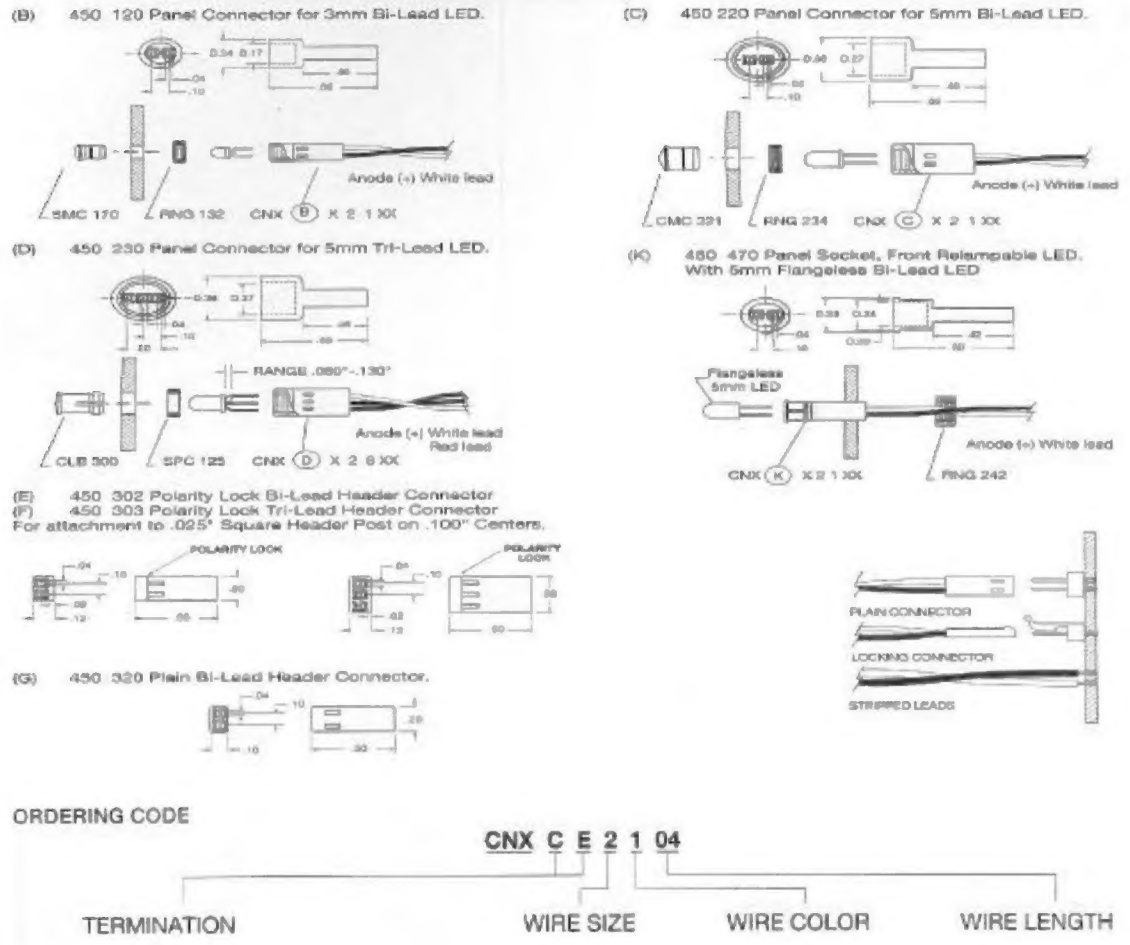
PRE-WIRED SOLDERLESS LED INTERCONNECT


(B) 450 120 Panel Connector for 3mm Bi-Lead LED.
Anode (+) White lead
SMC 170
RNG 132
CNX B X 2 1 XX
(C) 450 220 Panel Connector for 5mm Bi-Lead LED.
Anode (+) White lead
CMC 221
RNG 234
CNX C X 2 1 XX
(D) 450 230 Panel Connector for 5mm Tri-Lead LED.
RANGE .080"-.130"
Anode (+) White lead
Red lead
CLB 300
SPC 125
CNX D X 2 8 XX
(K) 450 470 Panel Socket, Front Relampable LED.
With 5mm Flangeless Bi-Lead LED
Flangeless 5mm LED
Anode (+) White lead
CNX K X 2 1 XX
RNG 242
(E) 450 302 Polarity Lock Bi-Lead Header Connector
(F) 450 303 Polarity Lock Tri-Lead Header Connector
For attachment to .025" Square Header Post on .100" Centers.
POLARITY LOCK
(G) 450 320 Plain Bi-Lead Header Connector.
PLAIN CONNECTOR
LOCKING CONNECTOR
STRIPPED LEADS

ORDERING CODE

CNX C E 2 1 04

TERMINATION | WIRE SIZE | WIRE COLOR | WIRE LENGTH

Note: 450 030 wire terminal is standard when a connector is ordered.

A 450 030 - TERMINAL BRIGHT TIN		22 AWG	1 - WHT - BLK	04 - 4 INCH
B 450 120 - 3mm Panel Connector	2 Lead			08 - 8 INCH
C 450 220 - 5mm Panel Connector	2 Lead		6 - WHT - RED- BLK	12 - 12 INCH
D 450 230 - 5mm Panel Connector	3 Lead			18 - 18 INCH
E 450 302 - Locking Header Cntr	2 Lead			24 - 24 INCH
F 450 303 - Locking Header Cntr	3 Lead			
G 450 320 - Plain Header Cntr	2 Lead			
K 450 470 - Panel Socket	2 Lead			
X Wire Leads- Stripped Ends				

Jameco Part number 109137

CONXRITE®

PANEL INTERCONNECT PRE WIRED WITH RESISTOR

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U.S. & Foreign Pat. Pend

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from
234
65" to

Hole Size - CMC 321 & CMS 322 use .281". For all other lense mounts use .250". LED Lead Length - CMC & CMS lenses, trim to .250" ± .010". For all other lense mounts trim to .275 ± .010".

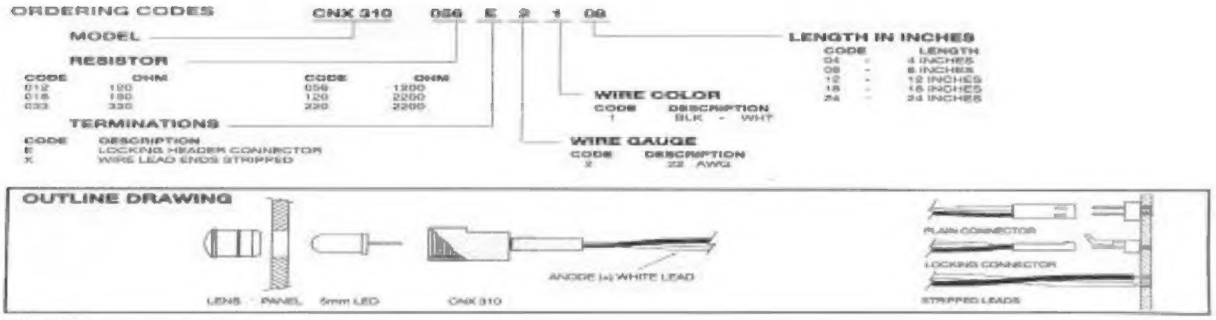
APPLICATION - CONXRITE makes quick and easy plug-in connections between panel mounted LEDs with lenses and a power source. Utilizing various cable lengths and cable terminations, CONXRITE offers a cost reducing solution to interconnection problems.

VERSATILITY - CONXRITE with ballast resistor can be used on circuits from 3 to 28 volts. Panel thickness can vary from 1/32 to 1/4 inch. Makes positive panel connections for either wet or dry applications with CMS lense. See data sheet for CLIPLITE AND CUBELITE lense mounts.

DESIGN - CONXRITE has a molded plastic body with self-contained 1/4 watt resistor. Pre-attached wires are provided with terminals, header connector or with stripped leads.

INSTALLATION - Modular cabling system's plug-in feature simplifies the electrical connection from panel mounted LEDs to PCB, eliminating the need for assembly tools. Cost and time savings from the elimination of soldering and terminal crimping operations are substantial.

EASY INSTALLATION



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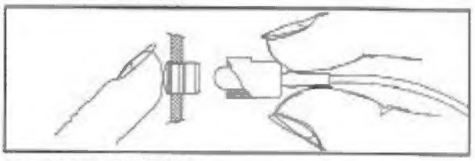

LED PANEL MOUNTS

Also, see CLIPLITE clipmount and CUBELITE lense mount data sheets for additional panel mounts.

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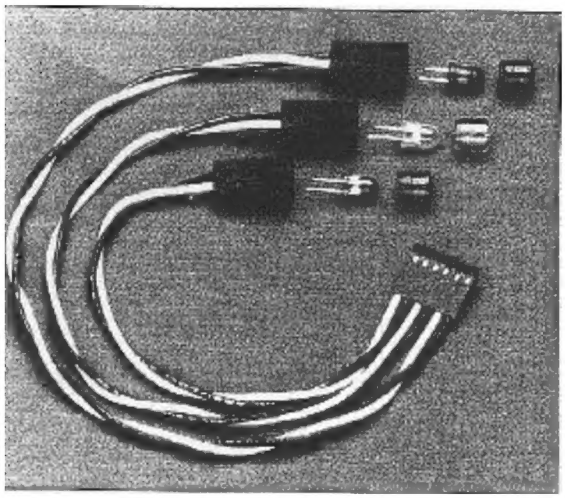
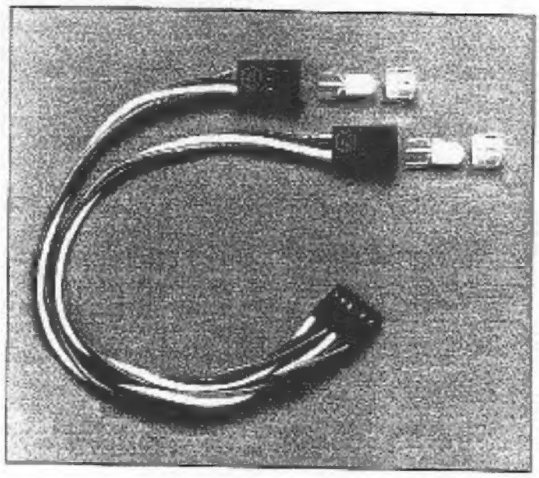
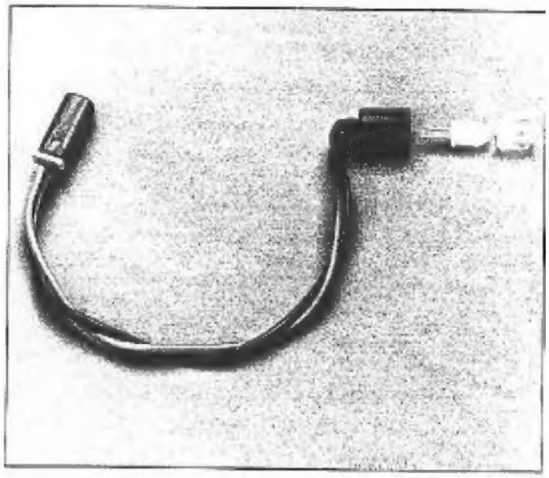
CUSTOM CABLE ASSEMBLIES



ASSEMBLY OF THREE BI-LEAD LEDs WITH VARIED WIRE LENGTHS AND ONE POLARITY LOCKING HEADER

CABLE ASSEMBLY WITH DUAL TRI-LEAD LEDs AND ONE POLARITY LOCKING HEADER





AUTOMOTIVE FLOOD LIGHT ASSEMBLY DESIGNED AND MANUFACTURED TO MEET CUSTOMERS SPECIFICATIONS

CONXRITE®

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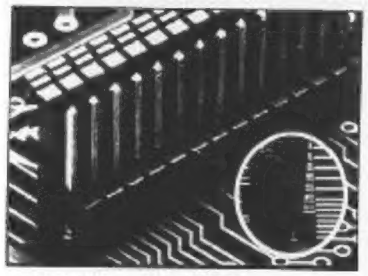
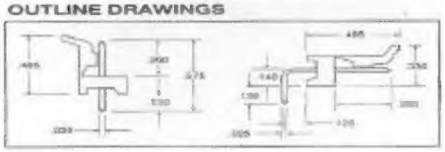
POSITIVE LOCKING POLARITY HEADER



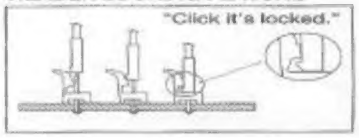
FEATURES

- Locking lever provides polarity integrity by restricting insertion of connector in reverse.
- Lever clicks and locks preventing header connector from being retracted inadvertently.
- Locking header available in 2 to 28 pin positions, vertical or horizontal configuration.
- Designed for both vertical and horizontal mounting on the printed circuit board.
- Pins are .025" square brass, tin plated, located on .100" centers.
- Locking header mates with VCC locking header connectors P/N 450 30X equal.

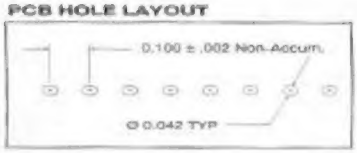
OUTLINE DRAWINGS



HEADER LOCKING FEATURE



PCB HOLE LAYOUT

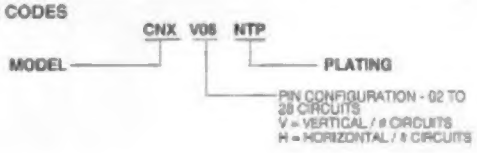


SPECIFICATIONS

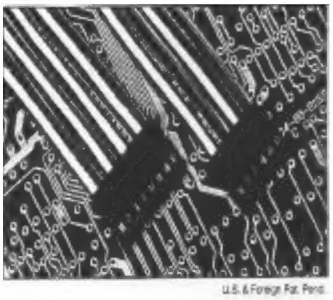
MATERIAL Body - Thermoplastic (black) U.L. 94 V2
Pins - Brass .025" square tin plate

Spacing - Pins on .100" centers
Header - Mates with VCC locking header connector, 450 30X series or equal.

ORDERING CODES



HEADER CONNECTOR / TRI-FINGER TERMINAL



FEATURES

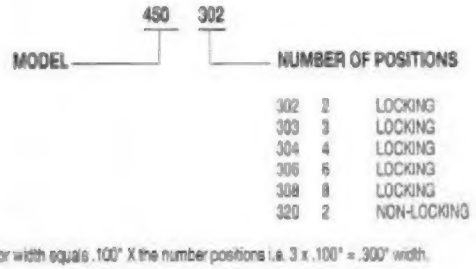
. Header connector mates with VCC locking
header CNX xxx, Molex 8373, 7478 friction header or equal.
. Header connectors 2, 3, 4, 6 and 8 position
are end-to-end stackable.
. Header connectors with and without locking
tab rated U.L. 94 V0.

- Terminal's unique tri-finger design mates with pins from .017" round to .025" square.
- Terminal for use specifically with VCC header connectors.
- Terminals designed for use with 22 gauge wire.

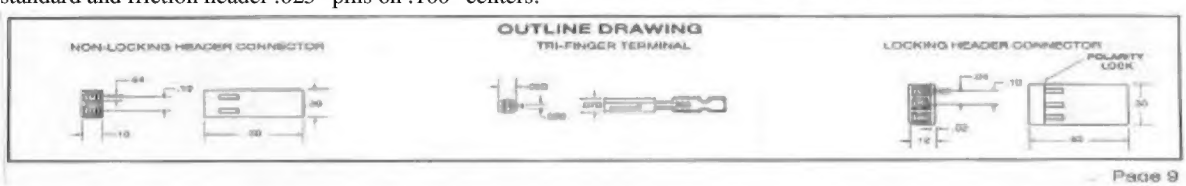
ORDERING CODES

SPECIFICATIONS

MATERIAL Header connector - Thermoplastic (black) U.L. 94 V0
Terminals - Phosphor bronze, tin plated.
Rate 3 amp continuous service.
Wire - 22 AWG, 7 strand copper, PVC insulated.
MOUNTING: Plain header connector 450 320 mates with any standard .025" square header on .100" centers. Locking header connectors 450 302 thru 303 mate with VCC positive locking header 450 series. Also mates with standard and friction header .025" pins on .100" centers.



Note: Connector width equals .100" X the number positions i.e. 3 x .100" = .300" width.



Jameco Part number 109137

CONXRITE®

VISUAL COMMUNICATIONS COMPANY, INC.
7920-G Arjons Dr., San Diego, CA 92126
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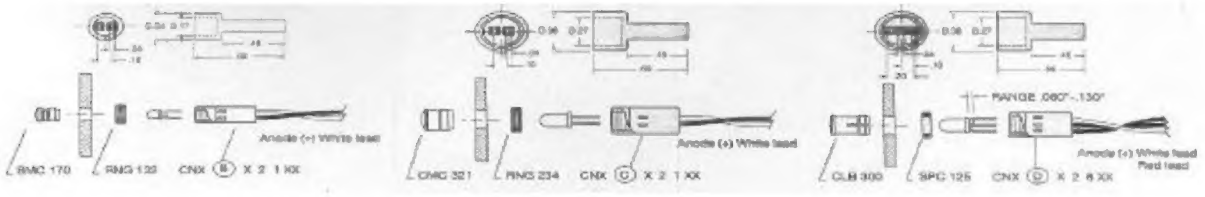
CUSTOM CABLE ASSEMBLY ORDER FORM

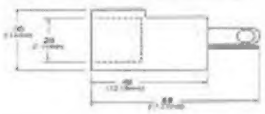
PANEL CONNECTORS FOR 3m & 5mm LEDs

450 120 Panel Connector for 3mm Bi-Lead LED. 450 220 Panel Connector for 5mm Bi-Lead LED. 450 230 Panel Connector for 5mm Tri-Lead LED.



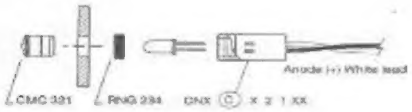
PANEL CONNECTOR WITH RESISTOR FOR 5mm LEDs

CNX 310 WITH RESISTOR



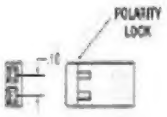
RESISTOR VALUES

P/N	VALUE	P/N	VALUE
310 012	120 OHMS	310 056	560 OHMS
310 018	180 OHMS	310 120	1200 OHMS
310 033	330 OHMS	310 220	2200 OHMS



Note: For additional panel connector specifications and lense information refer to page 8.

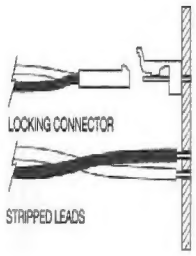
LOCKING HEADER CONNECTORS



P/N	DESCRIPTION
450 302	2 POSITION HEADER
450 303	3 POSITION HEADER
450 304	4 POSITION HEADER
450 306	6 POSITION HEADER
450 308	8 POSITION HEADER

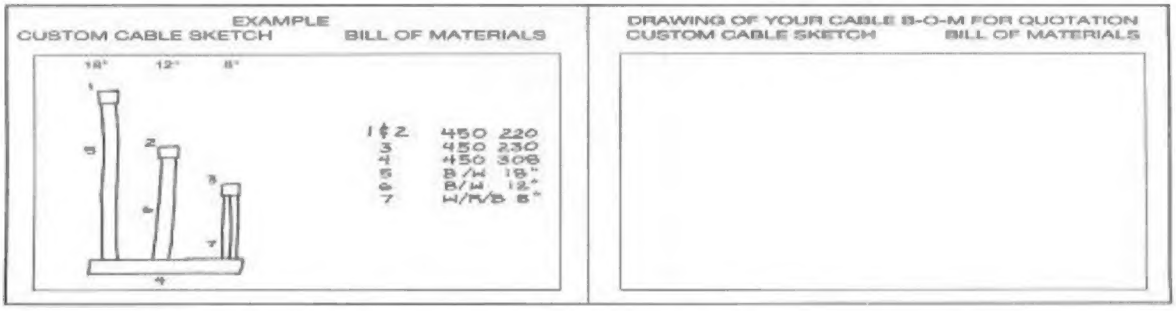
Note: For additional header connector specifications refer to page 8.

WIRE CONFIGURATION



COLOR WHITE & BLACK
WHITE, RED & BLACK
GAUGE 22 AWG
LENGTH (LENGTH IN INCHES)
4" 8" 12" 18"
24" 36" 48" 60"

Note assemblies without header connector will have stripped leads.



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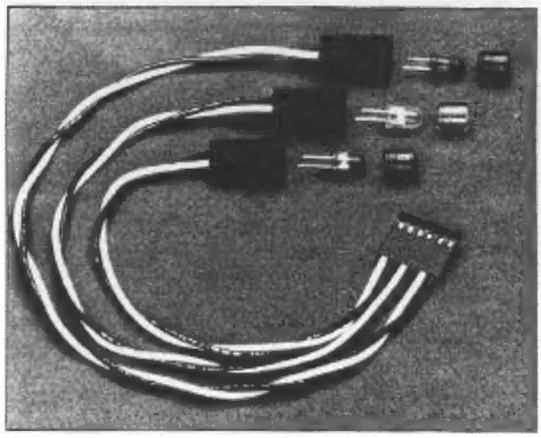
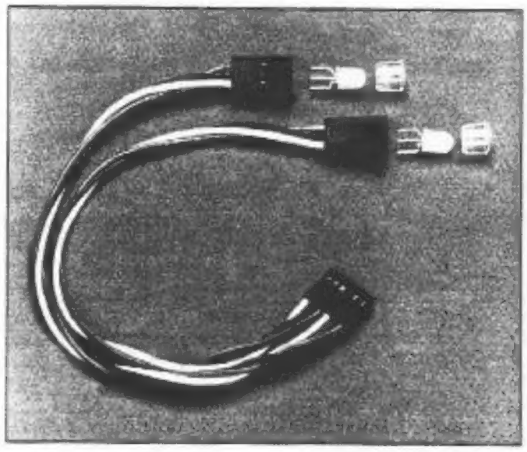
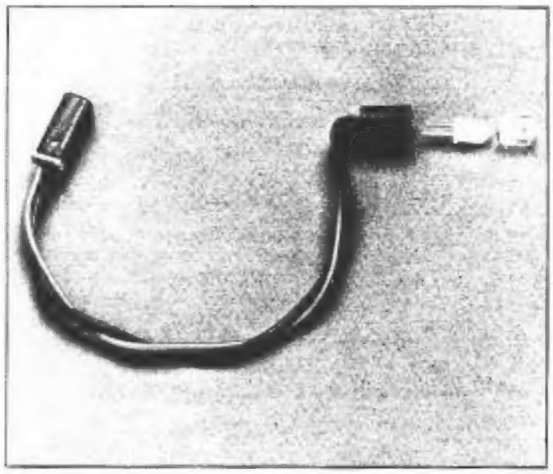
CUSTOM CABLE ASSEMBLIES



ASSEMBLY OF THREE BI-LEAD LEDs WITH VARIED WIRE LENGTHS AND ONE POLARITY LOCKING HEADER



CABLE ASSEMBLY WITH DUAL TRI-LEAD LEDs AND ONE POLARITY LOCKING HEADER



AUTOMOTIVE FLOOD LIGHT ASSEMBLY DESIGNED AND MANUFACTURED TO MEET CUSTOMERS SPECIFICATIONS

Jameco Part number 109137

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SIMPLIFIED METHOD FOR CONNECTING PANEL MOUNTED 5mm LEDs

SI

M d.
de current

M l, CMS
SQB 400
unts. See

) for CLF
9
clip-mounts. Max. .125 (3.17mm) for CMC 321 and CMS 322 lense mounts. Max. .250 (6.35mm) for CLP 126, CLB 300, CLR 301 and SQB 400. Use SPC 125 spacer for panels less than 3/16".
Soldering - Caution, excessive heat applied to contacts may cause damage to the plastic body.
Hole Size - CMC 321 and CMS 322 .281 ± .002 (7.14mm) .All other mounts .250 ± .002 (6.35mm).
Hole should be deburred but not chamfered.
NOTE: Trim LED leads to .275 ± -.010 (6.99mm).

DESIGN - CONXRITE has a molded plastic body with self-contained 1/4 watt resistor. When an external resistor is required or desired, CONXRITE is available without the built-in resistor.

VERSATILITY - CONXRITE, with or without the ballast resistor, can be used on circuits from 3 to 28 volts. Panel thickness can vary from 1/32 to 1/4 inch. Makes positive connection with CLIPLITE lense mounts, CLIPLITE clipmounts and CUBELITE lense mounts.

INSTALLATION - CONXRITE requires no assembly tools and provides a simple, fast, press-fit connection. Eliminates direct hard-wiring to the LED that could result in heat damage to it during final assembly.

COST-EFFECTIVENESS - CONXRITE enables preassembly of wiring harness precluding the need for hard-wiring directly to the LEDs. Permits easy replacement of defective LEDs in final test and field service. CONXRITE helps lower labor costs.

ORDERING CODES

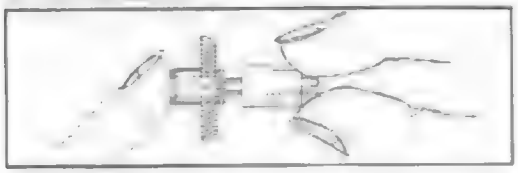
CNX 310 012

MODEL

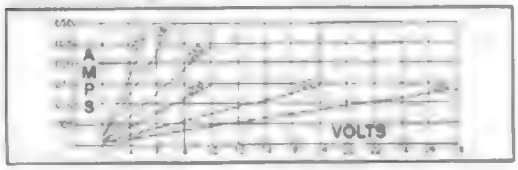
RESISTOR CODE

CODE	VALUE	CODE	VALUE
000	NO RESISTOR	056	[illegible] OHMS
012	120 OHMS	120	1200 OHMS
018	180 OHMS	220	2200 OHMS
033	330 OHMS		

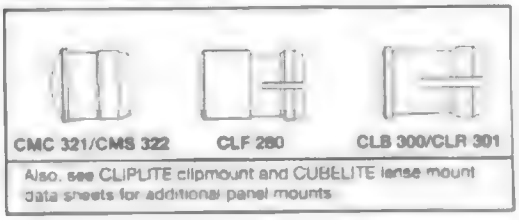
EASY INSTALLATION



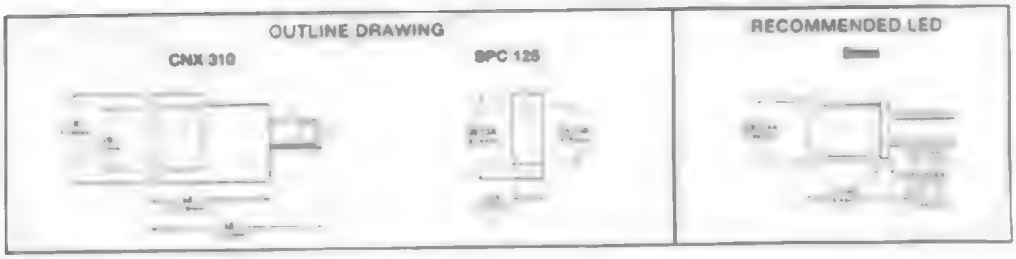
RESISTOR SELECTOR



LED PANEL MOUNTS


CMC 321/CMS 322
CLF 280
CLB 300/CLR 301
Also, see CLIPLITE clipmount and CUBELITE lense mount data sheets for additional panel mounts

OUTLINE DRAWING

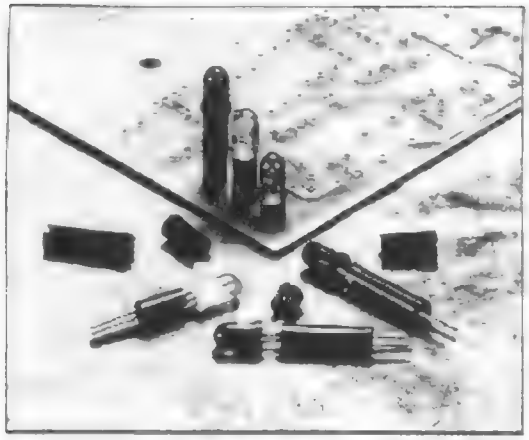


Jameco Part number 109137

P-C-LITE®

VISUAL COMMUNICATIONS COMPANY, INC.
7920-G Arjons Dr., San Diego, CA 92126
In CA (619) 549-6900 (800) 522-5546
FAX (619) 549-3520 www.vcclite.com

PCB STANDOFFS FOR BI/TRI-LEAD COMPONENTS



U.S. & Foreign Pat. Pend.

APPLICATION- P-C-LITE component standoffs are designed for printed circuit board mounting of multi-lead devices ie. LEDs, IR emitter/detectors, lamps, resistors, capacitors, transistors and diodes.

VERSATILITY- P-C-LITE component standoffs cope with various problems in mounting passive components. These include height control, lateral stability, lead retention, lead shorting and removal of soldering residue.

DESIGN- P-C-LITE component standoffs provide lead separation and retention for both bi and tri-lead components. Molded tabs retain the component and standoff as a unit permitting preassembly operations. Clearance pads are provided for proper pcb cleaning.

INSTALLATION- P-C-LITE component standoffs permit the use of various shapes and sizes of LEDs. as well as other bi/tri-lead components. Device height control is simplified with mounts ranging in lengths from .100 to 1.00 inch in increments of .010 inch.

SPECIFICATIONS

MATERIAL: Standoff - Thermoplastic O.L.94 VO. Color, Black.

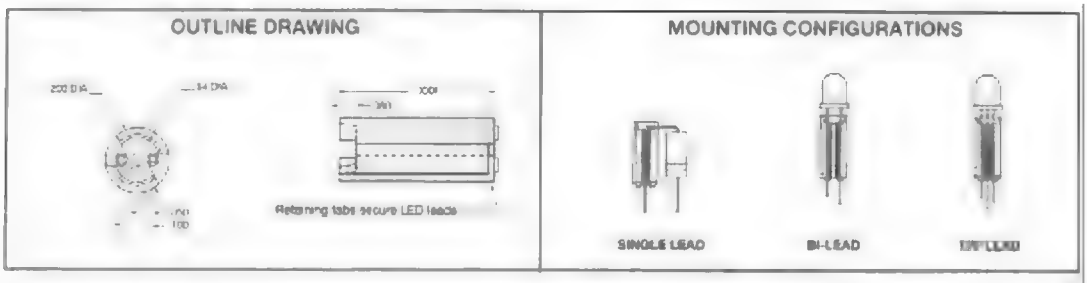
DESIGN: Channels provide lead separation and lateral stability for components. Molded tabs retain component leads within the standoff for preassembly. Raised pads allow for easy pcb cleaning.

MOUNTING: Suitable for passive components, bi-lead, tri-lead, 3mm, 5mm, LEDs, resistors, capacitors, diodes. Standoffs vary in height from .100 minimum to 1.0 inch maximum, increments of .010 inch.

100	200	300	400	500	600	700	800	900
110	210	310	410	510	610	710	810	910
120	220	320	420	520	620	720	820	920
130	230	330	430	530	630	730	830	930
140	240	340	440	540	640	740	840	940
150	250	350	450	550	650	750	850	950
160	260	360	460	560	660	760	860	960
170	270	370	470	570	670	770	870	970
180	280	380	480	580	680	780	880	980
190	290	390	490	590	690	790	890	990

also available in one inch

NEW U.L. 94 VO.



Jameco Part number 109137

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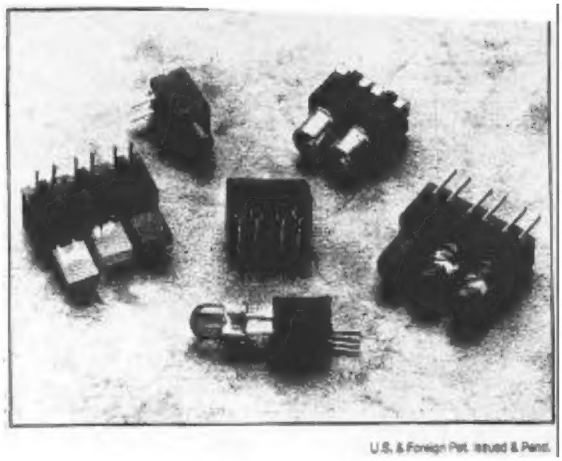
LED MOUNTING SOCKETS FOR CIRCUIT BOARDS – THT & SMT



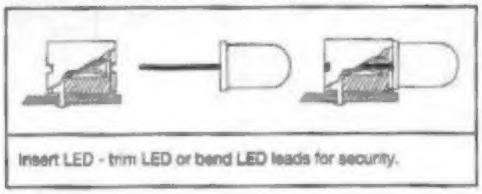
APPLICATION - P-C-LITEs are used as circuit board mounting sockets for status, logic and fault detection lights. Also used for back panel lighting, front panel function lights and mounting of photodetection type devices.

VERSATILITY - P-C-LITEs are relampable, no direct soldering to LED. PCH and SMD series mount horizontally, PCV series mounts vertically. The PCV can be installed on one side of the PCB while the LEDs are inserted from the reverse side of the board.

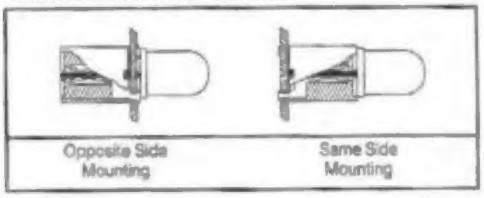
DESIGN - P-C-LITEs are manufactured from UL listed thermoplastics. Unique contact design permits automatic adjustment to the various sizes and shapes of LED leads. Also accommodate IR emitters, phototransistors and incandescent bi-pin lamps.

INSTALLATION - P-C-LITEs are wave soldered (PCH/PCV) or surface mounted (SMD) to PCB along with other components. Sockets are provided with polarity identification. Molded standoffs permit easy board cleaning. Lock-type security for component leads in high vibration and shock environments.

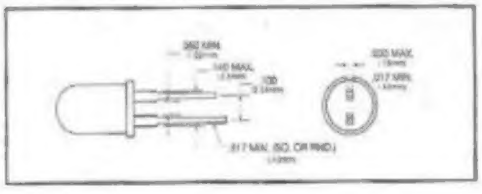
HORIZONTAL MOUNT PCH & SMD SERIES



VERTICAL MOUNT PCV SERIES



LED LEAD DIMENSIONS



SPECIFICATIONS

MATERIALS: HOUSING - Thermoplastic, U.L. 94 VO (black).
CONTACTS - Phosphor bronze, 60/40 tin plated.

MOUNTING: PCH Series - Thru hole, horizontal mounting sockets, .035 (.89mm) holes on .100 (2.54mm) centers. (see pattern on next page)

PCV Series - Thru hole, vertical mounting sockets, .035 (.89mm) holes on .100 (2.54mm) centers with optional .060 (1.52mm) holes for opposite side mounting. Same side mounting, delete the .060 holes. (see pattern on next page)

SMD Series - Surface mount, horizontal mounting sockets, .060 (1.52mm) X .060 (1.52mm) component pad. (see pattern on next page).

SMD 330 available in bulk, on tape/reel and in tubes.

SMD 660 & 990 available in bulk and in tubes.

NOTE: Insert LED leads into SMD socket from pad end only.

SPACER - STD standoff series (see specs. on page 11)

LED DATA: Type - 3mm or 5mm

Leads - Min. .017 (.43mm) round or square. Max. .030 (.76mm) thickness - .040 (1.02mm) width.

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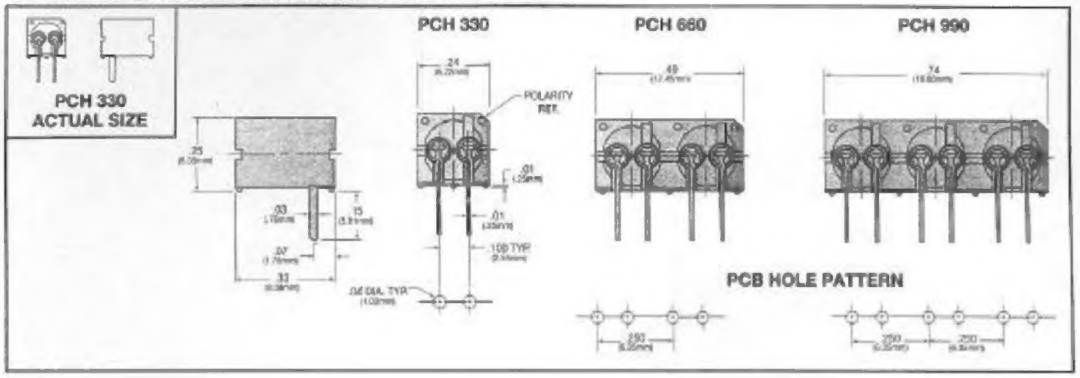
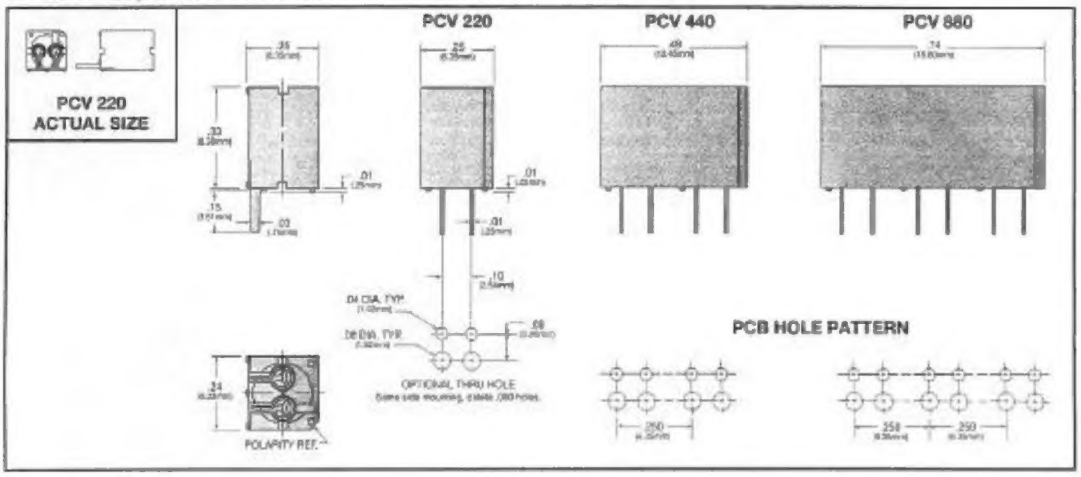
OUTLINE DRAWINGS & ORDERING CODES

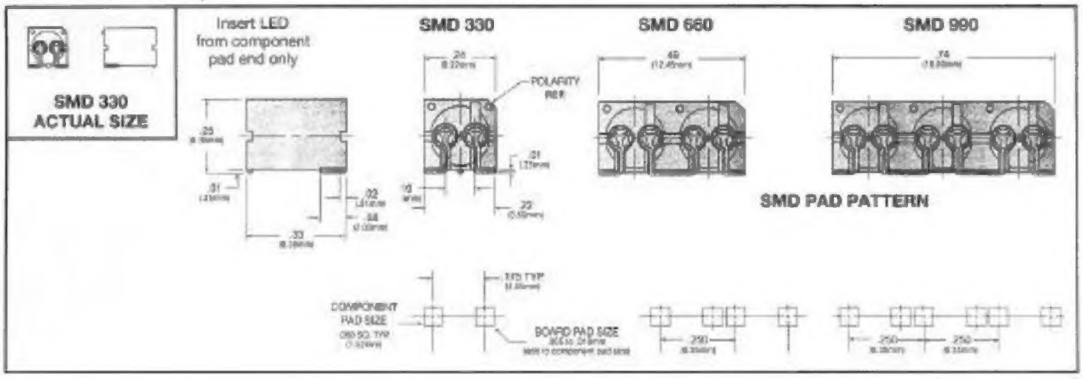
THRU HOLE, HORIZONTAL SOCKET - PCH SERIES



THRU HOLE, VERTICAL SOCKET - PCV SERIES



SURFACE MOUNT, HORIZONTAL SOCKET - SMD SERIES



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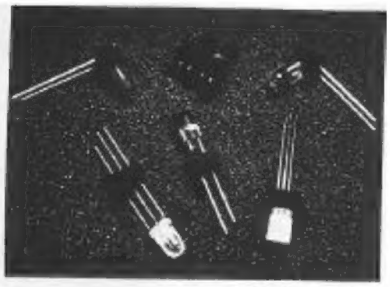
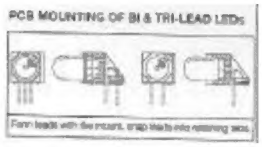
PCB MOUNT FOR BI/TRI-LEAD LEDS

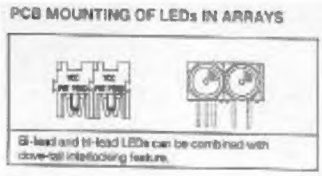


U.S. & For. Pat. Issued & Pend.

FEATURES

- Right angle PCB mount for bi and tri-lead LEDS for use as logic and diagnostic indicators
- Accommodates round and rectangular shapes of LEDS with or without flanges
- Dove-tail interlock feature allows mounting of both mono and multi-colored LEDS
- Mount forms LED leads which are locked into position by retaining tabs
- Formed LED leads are staggered in their length permitting easier PCB insertion
- Molded standoffs permit the easy cleaning of PCB after wave solding operation





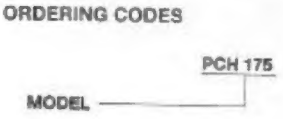
SPECIFICATIONS

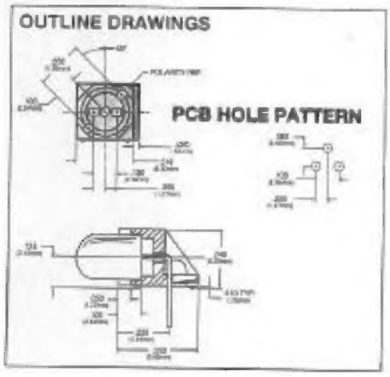
MATERIALS: Housing - Thermoplastic (black) U.L. 94 V0.

MOUNTING: PCH 175 - Right angle Thru-The-Hole mount for LEDS. Can be used as a single LED mount or banded together in an array with its dovetail interlocking feature.

When banded together with the PCH 175 the LEDS are on 250" centers.

LED: 5mm size - round or rectangular shape with or without f lange. Bi-lead, standard .100" lead spacing. Tri-lead, either .050" or .100" lead spacing. Both the bi-lead and tri-lead LEDS can also be combined in arrays with one another.



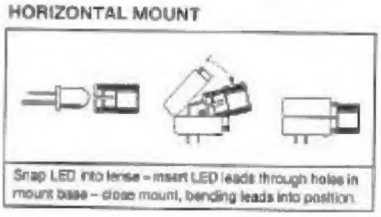


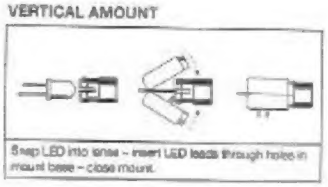
PCB MOUNTS FOR 3mm & 5mm LEDS

FEATURES

- Wave solders horizontally or vertically without special jigs or fixtures
- Stabilizes LED during packaing and physically protects after assembly
- Mounts flush, recessed or fully extended thru display panel without attachments
- Height compatible with switches and other circuit board mounted components
- Increases LED apparent brightness and viewing angle up to 180 degrees.
- Guards against IC damage by electrostatic discharge transmitted thru exposed LED

SPECIFICATIONS


HORIZONTAL MOUNT
Snap LED into lense – insert LED leads through holes in mount base – close mount, bending leads into position.



MATERIAL Body - General Purpose Nylon (U.L. Listed Materials).

Lense - Polycarbonate (U.L. Listed).

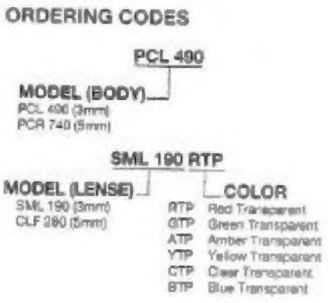
MOUNTING P C board, horizontally or vertically on .100 inch hole centers.

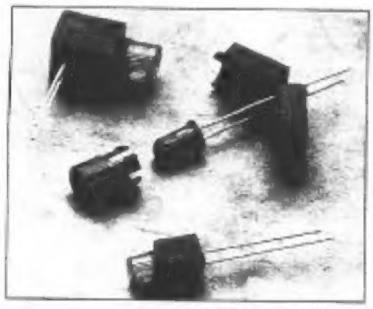
3mm (PCL 490 with SML 190) panel thickness from 1/64" to 3/16" thru a 7/32" clearance hole.

5mm (PCR 740 with CLF 280) panel thickness from 1/32" to 9/32" thru a 5/16" clearance hole. CLP series of the CLIPLITE clipmounts may also be used.

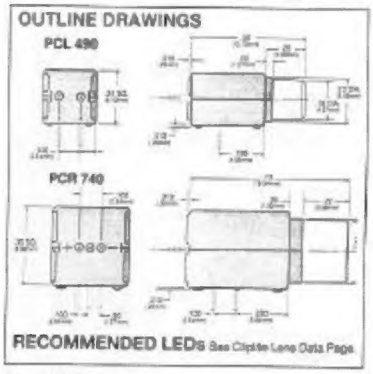
Permits flush mounting to full projection of the lense portion thru the panel.

LEDS Standard LEDS, diffused or nondiffused. See drawings. No attempt should be made to bend a lead with a stepped thickness.

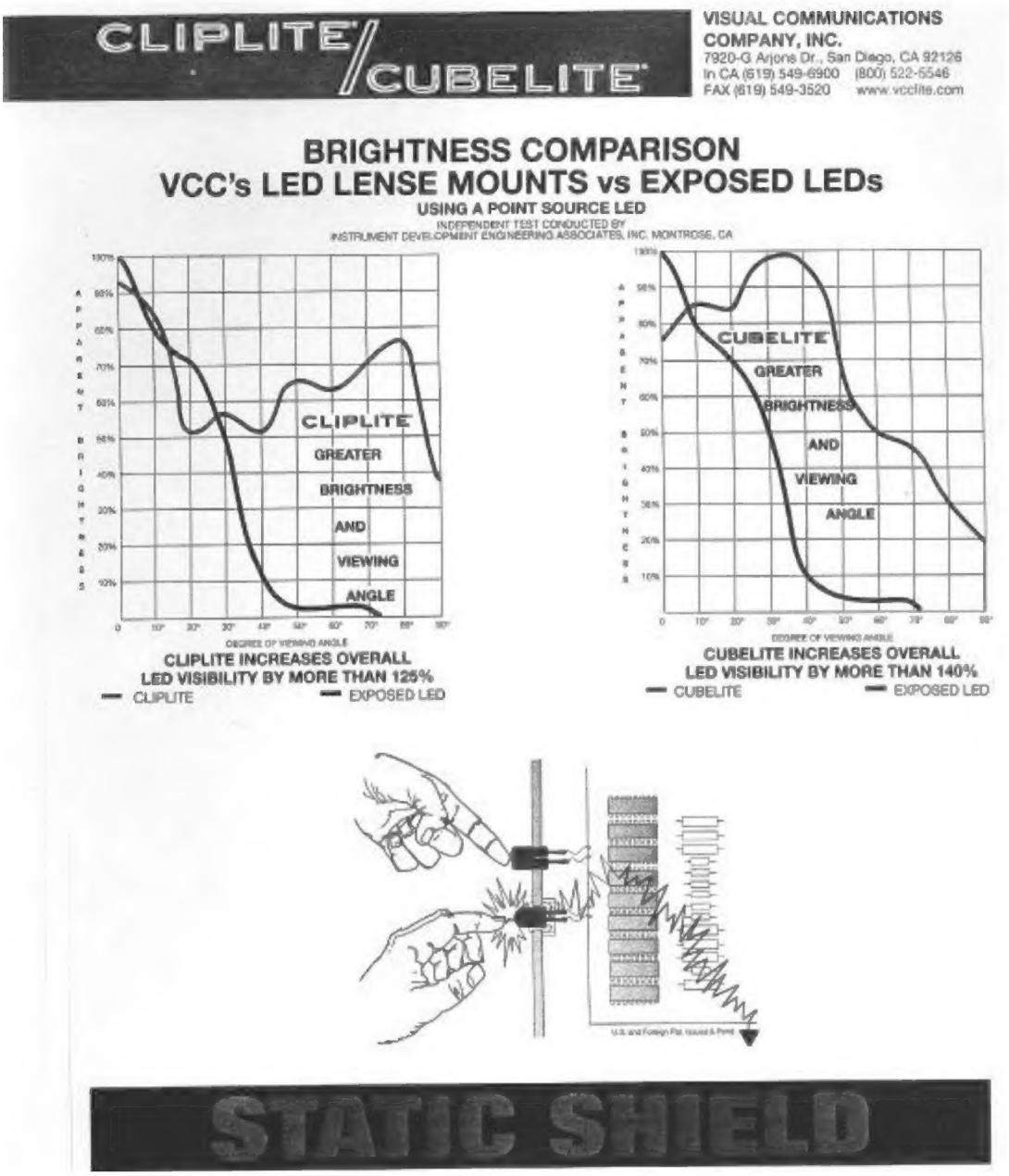




U.S. & For. Pat. Issued & Pend.



Jameco Part number 109137



LED LENSE MOUNTS PROTECT ICS UP TO 16 KV

By simply walking across a carpeted floor a person can generate 10,000 volts of electrostatic discharge (ESD). Tests reveal that an exposed panel mounted LED can permit transmission of ESD onto PC boards at a level as low as 7 KV, resulting in faults and catastrophic failures of ICS and other semi-conductor components.

Visual Communications Company offers you protective lense and mounting devices for LEDS to combat ESD, **(Cliplite & Cubelite).** Tests using these devices show that transmission of ESD does not occur until 15-16 KV is reached. This is a level sufficiently high enough to provide protection against electrostatic discharge.

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